

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

THE APPLICATION OF:

SAVERIO CARL FALCO ET. AL.

CASE NO.: BB1179USCIP

APPLICATION NO.: 10/658232

CONFIRMATION NO.:

GROUP ART UNIT: UNKNOWN

EXAMINER: UNKNOWN

FILED: SEPTEMBER 08, 2003

FOR: TETRAHYDROFOLATE METABOLISM ENZYMES

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In compliance with 37 CFR 1.97 and 1.98, Applicants bring to the attention of the U.S. Patent and Trademark Office information listed on the enclosed PTO/SB/08. A copy of the information is also enclosed.

Should any fee be required in connection with the filing of this Information Disclosure Statement, please charge such fee to Deposit Account No. 04-1928 (E. I. du Pont de Nemours and Company).

Respectfully submitted,

EMIL M. OROZCO, JR. AGENT FOR APPLICANTS

Registration No.: 50,823 Telephone: (302) 695-3121 Facsimile: (302) 695-3125

Dated: February 06, 2004

Enclosures

PTO/SB/08b (08-03)
Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO					Complete if Known		
					Application Number	10/658232	
11	NFOF	RMATION DI	SCLO	SURE	Filing Date	September 08, 2003	
S	TAT	EMENT BY A	APPLI	CANT	First Named Inventor	Saverio Carl Falco Et. Al.	
					Art Unit	Unknown	
	((Use as many sheets as	necessary)	Examiner Name	Unknown	
St	heet	1	of	3	Attorney Docket Number	BB1179USCIP	

		NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
	1	PHILIPPE GOYETTE ET AL., Gene structure of human and mouse methlenetetrahydrofolate reductase (MTHFR), Mammalian Genome 9:652-656, 1998					
***************************************	2	B. D. GUENTHER ET AL., How folate fights disease, Nature structural biology, volume 6(4):293-294, 1999					
	3	BELEN TIZON ET AL., Identification of a Putative Methylenetetrahydrofolate Reductase by Sequence Analysis of a 6 8 kb DNA Fragment of Yeast Chromosome VII, Yeast, vol. 12:1047-1051, 1996					
	4	MARY G. WEST ET AL., Cloning and Characterization of the Saccharomyces cerevisiae Gene Encoding NAD-dependent 5,10-Methylenetetrahydrofolate Dehydrogenase, The Journal of Biological Chemistry, Vol. 268(5):153-160, 1993					
	5	LINDA D'ARI ET AL., Purification, Characterization, Cloning, and Amino Acid Sequence of the Bifunctional Enzyme 5,10-Methylenetetrahydrofolate Dehydrogenase/5,10-Methenyltetrahydrofolate Cyclohydrolase from Escherichia coli, The Journal of Biological Chemistry, Vol. 266(35):23953-23958, 1991 NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO: 5911425, ACCESSION NO: AAD55787, DECEMBER 13, 1999, S. ROJE ET AL., Isolation, characterization, and functional expression of cDNAs encoding NADH-dependent methylenetetrahydrofolate reductase from higher plants					
	6						
Examiner Signature		Date Considered					

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

2 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for for	m 1449B/PTO			Complete if Known		
				Application Number	10/658232	
INFORM	MATION E	DISCLO	SURE	Filing Date	September 08, 2003	
STATEMENT BY APPLICANT				First Named Inventor	Saverio Carl Falco Et. Al.	
				Art Unit	Unknown	
(Use as many sheets as necessary)				Examiner Name	Unknown	
Sheet	2	of	3	Attorney Docket Number	BB1179USCIP	

NON PATENT LITERATURE DOCUMENTS								
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²					
	7	NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO: 5911427, ACCESSION NO: AAD55788, DECEMBER 13, 1999, S. ROJE ET AL., Isolation, characterization, and functional expression of cDNAs encoding NADH-dependent methylenetetrahydrofolate reductase from higher plants						
	8	NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO: 5802606, ACCESSION NO: AAD51733, DECEMBER 13, 1999, S. ROJE ET AL., Isolation, characterization, and functional expression of cDNAs encoding NADH-dependent methylenetetrahydrofolate reductase from higher plants						
	9	NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 4753778, ACCESSION NO: CAB41971, MAY 4, 1999, A. HOMBERGER ET AL., Revised translation initiation site of the human methylenetetrahydrofolate reductase (MTHFR)						
	10	NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 1723913, ACCESSION NO. P53128, OCTOBER 16, 2001, B. TIZON ET AL., Identification of a putative methylenetetrahydrofolate reductase by sequence analysis of a 6.8 kb DNA fragment of yeast chromosome VII						
	11	SANJA ROJE ET AL., Metabolic Engineering in Yeast Demonstrates that S-Adenosylmethionine Controls Flux through the Methylenetetrahydrofolate Reductase Reaction in Vivo, The Journal of Biological Chemistry, Vol. 277(6):4056-4061, 2002 NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 4336819, ACCESSION NO: AAD17965, JULY 5, 2001, P. GOYETTE ET AL., Gene structure of human and mouse methylenetetrahydrofolate						
	12							
Examiner Signature		Date Considered						

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.	Draw line through citation if not in conformance and not
considered. Include convert this form with payt communication to conline	

² Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (08-03)
Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Subatituta for							
Substitute ioi	form 1449B/PTO			Complete if Known			
				Application Number	10/658232		
INFOF	RMATION DI	SCLO	SURE	Filing Date	September 08, 2003		
STAT	EMENT BY A	APPLI	CANT	First Named Inventor	Saverio Carl Falco Et. Al.		
				Art Unit	Unknown		
((Use as many sheets as	necessary)	Examiner Name	Unknown		
Sheet	3	of	3	Attorney Docket Number	BB1179USCIP		
	STAT	(Use as many sheets as	(Use as many sheets as necessary	INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) Sheet 3 of 3	STATEMENT BY APPLICANT First Named Inventor Art Unit (Use as many sheets as necessary) Examiner Name		

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
	13	SANJA ROJE ET AL., Isolation, Characterization, and Functional Expression of cDNAs Encoding NADH-dependent Methylenetetrahydrofolate Reductase from Higher Plants, The Journal of Biological Chemistry, Vol. 274(51):36089-36096, 1999				
•	14	NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 1723913, ACCESSION NO: P53128, OCTOBER 16, 2001, B. TIZON ET AL., Identification of a putative methylenetetrahydrofolate reductase by sequence analysis of a 6.8 kb DNA fragment of yeast chromosome VII				
***************************************	15	XIAOYIN SHAN ET AL., Functional Characterization of Human Methylenetetrahydrofolate Reductase in Saccharomyces cerevisiae, The Journal of Biological Chemistry, Vol. 274(46):32613-32618, 1999				
						
Examiner Signature		Date Considered				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



PTO/SB/92 (08-03)

Approved for use through 07/31/2006. OMB 0561-0031
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Certificate of Mailing under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

LISA Z. TURNER

Typed or printed name of person signing Certificate

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

10/658232 BB1179USCIP INFORMATION DISCLOSURE STATEMENT PTO/SB/08 FORMS (3) **REFERENCES (15) POSTCARD**

This collection of information is required by 37 CFR 1.8. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.8 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.